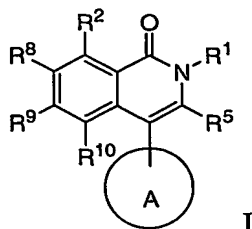


## WHAT IS CLAIMED IS:

1. A compound of the structure:



- 5 or a pharmaceutically acceptable salt, crystal form, or hydrate, wherein:

A is

- a) an aryl ring, wherein any stable aryl ring atom is independently unsubstituted or substituted with

1) halogen,

2) NO<sub>2</sub>,

10 3) CN,

4) CR<sup>46</sup>=C(R<sup>47</sup>R<sup>48</sup>)<sub>2</sub>,

5) C≡C R<sup>46</sup>,

6) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>OR<sup>46</sup>,

7) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>N(R<sup>46</sup>R<sup>47</sup>),

15 8) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>C(O)R<sup>46</sup>,

9) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>C(O)OR<sup>46</sup>,

10) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>R<sup>46</sup>,

11) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>S(O)<sub>0-2</sub>R<sup>61</sup>,

12) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>S(O)<sub>0-2</sub>N(R<sup>46</sup>R<sup>47</sup>),

20 13) OS(O)<sub>0-2</sub>R<sup>61</sup>,

14) N(R<sup>46</sup>)C(O)R<sup>47</sup>,

15) N(R<sup>46</sup>)S(O)<sub>0-2</sub>R<sup>61</sup>,

16) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>N(R<sup>46</sup>)R<sup>61</sup>,

17) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>N(R<sup>46</sup>)R<sup>61</sup>OR<sup>47</sup>,

25 18) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>N(R<sup>46</sup>)(CR<sup>k</sup>R<sup>l</sup>)<sub>s</sub>C(O)N(R<sup>47</sup>R<sup>48</sup>),

19) N(R<sup>46</sup>)(CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>R<sup>61</sup>,

20) N(R<sup>46</sup>)(CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>N(R<sup>47</sup>R<sup>48</sup>),

21) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>C(O)N(R<sup>47</sup>R<sup>48</sup>), or

22) oxo, or

b) a heteroaryl ring selected from the group consisting of

a 5-membered unsaturated monocyclic ring with 1, 2, 3 or 4 heteroatom ring atoms selected from the group consisting of N, O or S,

a 6-membered unsaturated monocyclic ring with 1, 2, 3 or 4 heteroatom ring atoms selected from the group consisting of N, O and S, and

a 9- or 10-membered unsaturated bicyclic ring with 1, 2, 3 or 4 heteroatom ring atoms selected from the group consisting of N, O or S;

wherein any stable S heteroaryl ring atom is unsubstituted or mono- or di-substituted with oxo, and any stable C or N heteroaryl ring atom is independently unsubstituted or substituted with

1) halogen,

2) NO<sub>2</sub>,

3) CN,

4) CR<sup>46</sup>=C(R<sup>47</sup>R<sup>48</sup>)<sub>2</sub>,

5) C≡CR<sup>46</sup>,

6) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>OR<sup>46</sup>,

7) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>N(R<sup>46</sup>R<sup>47</sup>),

8) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub> C(O)R<sup>46</sup>,

9) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub> C(O)OR<sup>46</sup>,

10) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>R<sup>46</sup>,

11) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub> S(O)<sub>0-2</sub>R<sup>61</sup>,

12) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub> S(O)<sub>0-2</sub>N(R<sup>46</sup>R<sup>47</sup>),

13) OS(O)<sub>0-2</sub>R<sup>61</sup>,

14) N(R<sup>46</sup>)C(O)R<sup>47</sup>,

15) N(R<sup>46</sup>)S(O)<sub>0-2</sub>R<sup>61</sup>,

16) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>N(R<sup>46</sup>)R<sup>61</sup>,

17) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>N(R<sup>46</sup>)R<sup>61</sup>OR<sup>47</sup>,

18) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>N(R<sup>46</sup>)(CR<sup>k</sup>R<sup>l</sup>)<sub>s</sub>C(O)N(R<sup>47</sup>R<sup>48</sup>),

19) N(R<sup>46</sup>)(CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>R<sup>61</sup>,

20) N(R<sup>46</sup>)(CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>N(R<sup>47</sup>R<sup>48</sup>),

21) (CR<sup>i</sup>R<sup>j</sup>)<sub>r</sub>C(O)N(R<sup>47</sup>R<sup>48</sup>), or

22) oxo;

R<sup>1</sup> is selected from the group consisting of

1) hydrogen,

2) (CR<sup>a</sup>R<sup>b</sup>)<sub>n</sub>R<sup>40</sup>

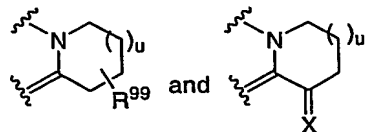
- 3)  $(\text{CR}^a\text{R}^b)_n\text{OR}^{40}$ ,
- 4)  $(\text{CR}^a\text{R}^b)_n\text{N}(\text{R}^{40}\text{R}^{41})$ ,
- 5)  $(\text{CR}^a\text{R}^b)_n\text{N}(\text{R}^{40})\text{C}(\text{O})\text{OR}^{41}$ ,
- 6)  $(\text{CR}^a\text{R}^b)_n\text{N}(\text{R}^{40})(\text{CR}^c\text{R}^d)_2\text{N}(\text{R}^{41})\text{C}(\text{O})\text{R}^{49}$ ,
- 7)  $\text{C}_{3-8}$  cycloalkyl,
- 8)  $(\text{CR}^a\text{R}^b)_n\text{C}(\text{O})\text{OR}^{40}$ ,
- 9)  $(\text{CR}^a\text{R}^b)_n\text{N}(\text{R}^{40})(\text{CR}^c\text{R}^d)_{1-3}\text{R}^{41}$ ,
- 10)  $(\text{CR}^a\text{R}^b)_n\text{S}(\text{O})_{0-2}\text{R}^6$ ,
- 11)  $(\text{CR}^a\text{R}^b)_n\text{S}(\text{O})_{0-2}\text{N}(\text{R}^{40}\text{R}^{41})$ ,
- 12)  $(\text{CR}^a\text{R}^b)_n\text{N}(\text{R}^{40})\text{R}^6\text{OR}^{41}$ ,
- 13)  $(\text{CR}^a\text{R}^b)_n\text{N}(\text{R}^{40})(\text{CR}^c\text{R}^d)_{0-6}\text{C}(\text{O})\text{N}(\text{R}^{41}\text{R}^{42})$ ;

$\text{R}^5$  is selected from the group consisting of

- 1) hydrogen,
- 2) halogen,
- 3)  $\text{S}(\text{O})_{0-2}\text{N}(\text{R}^{53}\text{R}^{50})$ ,
- 4)  $\text{S}(\text{O})_{0-2}\text{R}^{62}$ ,
- 5)  $\text{CH}_3$ ,
- 6)  $\text{C}_3\text{-C}_6$  alkyl,
- 7)  $\text{C}_3\text{-C}_{10}$  cycloalkyl,
- 8)  $\text{R}^{82}$ ,

said alkyl, and cycloalkyl is unsubstituted, mono-substituted with  $\text{R}^{22}$ , di-substituted with  $\text{R}^{22}$  and  $\text{R}^{23}$ , tri-substituted with  $\text{R}^{22}$ ,  $\text{R}^{23}$  and  $\text{R}^{24}$ , or tetra-substituted with  $\text{R}^{22}$ ,  $\text{R}^{23}$ ,  $\text{R}^{24}$  and  $\text{R}^{25}$ ;

or  $\text{R}^1$  and  $\text{R}^5$  together with the atoms to which they are attached, form a ring selected from the group of structures consisting of



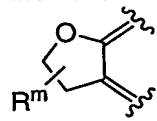
where  $u$  is 0 or 1,  $\text{R}^{99}$  is hydrogen or  $-\text{OH}$ , and  $\text{X}$  is  $\text{O}$  or  $\text{N}=\text{NOH}$ ;

$\text{R}^2$ ,  $\text{R}^8$ ,  $\text{R}^9$  and  $\text{R}^{10}$  are independently selected from:

- 1) hydrogen,

- 2) halogen,  
 3) NO<sub>2</sub>,  
 4) CN,  
 5) CR<sup>43</sup>=C(R<sup>44</sup>R<sup>45</sup>),  
 6) C≡CR<sup>43</sup>,  
 7) (CR<sup>e</sup>R<sup>f</sup>)<sub>p</sub>OR<sup>43</sup>,  
 8) (CR<sup>e</sup>R<sup>f</sup>)<sub>p</sub>N(R<sup>43</sup>R<sup>44</sup>),  
 9) (CR<sup>e</sup>R<sup>f</sup>)<sub>p</sub>C(O)R<sup>43</sup>,  
 10) (CR<sup>e</sup>R<sup>f</sup>)<sub>p</sub>C(O)OR<sup>43</sup>,  
 11) (CR<sup>e</sup>R<sup>f</sup>)<sub>p</sub>R<sup>43</sup>,  
 12) (CR<sup>e</sup>R<sup>f</sup>)<sub>p</sub>S(O)<sub>0-2</sub>R<sup>60</sup>,  
 13) (CR<sup>e</sup>R<sup>f</sup>)<sub>p</sub>S(O)<sub>0-2</sub>N(R<sup>43</sup>R<sup>44</sup>),  
 14) OS(O)<sub>0-2</sub>R<sup>60</sup>,  
 15) N(R<sup>43</sup>)C(O)R<sup>44</sup>,  
 16) N(R<sup>43</sup>)S(O)<sub>0-2</sub>R<sup>60</sup>,  
 17) (CR<sup>e</sup>R<sup>f</sup>)<sub>p</sub>N(R<sup>43</sup>)R<sup>60</sup>,  
 18) (CR<sup>e</sup>R<sup>f</sup>)<sub>p</sub>N(R<sup>43</sup>)R<sup>60</sup>OR<sup>44</sup>,  
 19) (CR<sup>e</sup>R<sup>f</sup>)<sub>p</sub>N(R<sup>43</sup>)(CR<sup>g</sup>R<sup>h</sup>)<sub>q</sub>C(O)N(R<sup>44</sup>R<sup>45</sup>),  
 20) N(R<sup>43</sup>)(CR<sup>e</sup>R<sup>f</sup>)<sub>p</sub>R<sup>60</sup>,  
 21) N(R<sup>43</sup>)(CR<sup>e</sup>R<sup>f</sup>)<sub>p</sub>N(R<sup>44</sup>R<sup>45</sup>), and  
 22) (CR<sup>e</sup>R<sup>f</sup>)<sub>p</sub>C(O)N(R<sup>43</sup>R<sup>44</sup>),

or R<sup>2</sup> and R<sup>8</sup> are independently as defined above, and R<sup>9</sup> and R<sup>10</sup>, together with the atoms to which they are attached, form the ring



, where R<sup>m</sup> is C<sub>1-6</sub>alkyl;

- 25 Ra, R<sup>b</sup>, R<sup>c</sup>, R<sup>d</sup>, R<sup>e</sup>, R<sup>f</sup>, R<sup>g</sup>, R<sup>h</sup>, R<sup>i</sup>, R<sup>j</sup>, R<sup>k</sup>, and R<sup>l</sup> are independently selected from the group consisting of:

- 1) hydrogen,  
 2) C<sub>1</sub>-C<sub>6</sub> alkyl,  
 3) halogen,  
 4) aryl,  
 5) R<sup>80</sup>,  
 6) C<sub>3</sub>-C<sub>10</sub> cycloalkyl, and  
 7) OR<sup>4</sup>,

said alkyl, aryl, and cycloalkyl being unsubstituted, monosubstituted with R<sup>7</sup>, disubstituted with R<sup>7</sup> and R<sup>15</sup>, trisubstituted with R<sup>7</sup>, R<sup>15</sup> and R<sup>16</sup>, or tetrasubstituted with R<sup>7</sup>, R<sup>15</sup>, R<sup>16</sup> and R<sup>17</sup>;

5

R<sup>4</sup>, R<sup>40</sup>, R<sup>41</sup>, R<sup>42</sup>, R<sup>43</sup>, R<sup>44</sup>, R<sup>45</sup>, R<sup>46</sup>, R<sup>47</sup>, R<sup>48</sup>, R<sup>49</sup>, R<sup>50</sup>, R<sup>51</sup>, R<sup>52</sup>, and R<sup>53</sup> and are independently selected from the group consisting of

10

- 1) hydrogen,
- 2) C<sub>1</sub>-C<sub>6</sub> alkyl,
- 3) C<sub>3</sub>-C<sub>10</sub> cycloalkyl,
- 4) aryl,
- 5) R<sup>81</sup>,
- 6) CF<sub>3</sub>,
- 7) C<sub>2</sub>-C<sub>6</sub> alkenyl, and
- 8) C<sub>2</sub>-C<sub>6</sub> alkynyl,

15

said alkyl, aryl, and cycloalkyl is unsubstituted, mono-substituted with R<sup>18</sup>, di-substituted with R<sup>18</sup> and R<sup>19</sup>, tri-substituted with R<sup>18</sup>, R<sup>19</sup> and R<sup>20</sup>, or tetra-substituted with R<sup>18</sup>, R<sup>19</sup>, R<sup>20</sup> and R<sup>21</sup>;

20 R<sup>6</sup>, R<sup>60</sup>, R<sup>61</sup>, R<sup>62</sup> and R<sup>63</sup> are independently selected from the group consisting of

- 1) C<sub>1</sub>-C<sub>6</sub> alkyl,
- 2) aryl,
- 3) R<sup>83</sup>, and
- 4) C<sub>3</sub>-C<sub>10</sub> cycloalkyl;

25

said alkyl, aryl, and cycloalkyl is unsubstituted, mono-substituted with R<sup>26</sup>, di-substituted with R<sup>26</sup> and R<sup>27</sup>, tri-substituted with R<sup>26</sup>, R<sup>27</sup> and R<sup>28</sup>, or tetra-substituted with R<sup>26</sup>, R<sup>27</sup>, R<sup>28</sup> and R<sup>29</sup>;

R<sup>7</sup>, R<sup>15</sup>, R<sup>16</sup>, R<sup>17</sup>, R<sup>18</sup>, R<sup>19</sup>, R<sup>20</sup>, R<sup>21</sup>, R<sup>22</sup>, R<sup>23</sup>, R<sup>24</sup>, R<sup>25</sup>, R<sup>26</sup>, R<sup>27</sup>, R<sup>28</sup>, and R<sup>29</sup> are

30 independently selected from the group consisting of

- 1) C<sub>1</sub>-C<sub>6</sub> alkyl,
- 2) halogen,
- 3) OR<sup>51</sup>,
- 4) CF<sub>3</sub>,
- 5) aryl,

35

- 6) C<sub>3</sub>-C<sub>10</sub> cycloalkyl,
- 7) R<sup>84</sup>,
- 8) S(O)<sub>0-2</sub>N(R<sup>51</sup>R<sup>52</sup>),
- 9) C(O)OR<sup>51</sup>,
- 10) C(O)R<sup>51</sup>,
- 11) CN,
- 12) C(O)N(R<sup>51</sup>R<sup>52</sup>),
- 13) N(R<sup>51</sup>)C(O)R<sup>52</sup>,
- 14) S(O)<sub>0-2</sub>R<sup>63</sup>,
- 15) NO<sub>2</sub>, and
- 16) N(R<sup>51</sup>R<sup>52</sup>);

R<sup>80</sup>, R<sup>81</sup>, R<sup>82</sup>, R<sup>83</sup> and R<sup>84</sup> are independently selected from a group of unsubstituted or substituted heterocyclic rings consisting of a 4-6 membered unsaturated or saturated monocyclic ring with 1, 2, 3 or 4 heteroatom ring atoms selected from the group consisting N, O and S, and a 9- or 10-membered unsaturated or saturated bicyclic ring with 1, 2, 3 or 4 heteroatom ring atoms selected from the group consisting or N, O or S; and

n, p, q, r, and s are independently 0, 1, 2, 3, 4, 5 or 6; provided that

when R<sup>9</sup> is OCH<sub>3</sub>, R<sup>1</sup> is CH<sub>3</sub> and R<sup>5</sup> is C(CH<sub>3</sub>)<sub>3</sub>, then A is substituted,

when R<sup>9</sup> is hydrogen, R<sup>1</sup> is CH<sub>3</sub>, and R<sup>5</sup> is hydrogen, then A is substituted,

when R<sup>9</sup> is hydrogen, R<sup>1</sup> is CH<sub>3</sub>, and R<sup>5</sup> is C(CH<sub>3</sub>)<sub>3</sub>, then A is substituted, provided the substituent is not CH<sub>3</sub>, and

when R<sup>9</sup> is OCH<sub>3</sub>, R<sup>1</sup> is CH<sub>3</sub>, R<sup>5</sup> is CH<sub>3</sub>, then A is substituted.

2. A compound of Claim 1, or a pharmaceutically acceptable salt thereof, wherein

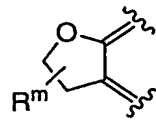
A is an aryl ring selected from phenyl, unsubstituted or substituted as in Claim 1, or a heteroaryl ring, unsubstituted or substituted as in Claim 1, selected from the group consisting of pyridine, pyrimidine, pyrazine, pyridazine, indole, pyrrolopyridine, benzimidazole, benzoxazole, benzothiazole, and benzoxadiazole;

R<sup>2</sup>, R<sup>8</sup>, R<sup>9</sup> and R<sup>10</sup> are independently selected from the group consisting of:

- 1) hydrogen,
- 2) halogen,
- 3) OR<sup>43</sup>,
- 4) (C(R<sup>e</sup>R<sup>f</sup>)<sub>p</sub>)R<sup>43</sup>,
- 5) CN, and

6)  $(\text{CR}^e\text{R}^f)_p\text{C}(\text{O})\text{N}(\text{R}^{43}\text{R}^{44})$ ,

or  $\text{R}^2$  and  $\text{R}^8$  are independently as defined above, and  $\text{R}^9$  and  $\text{R}^{10}$ , together with the atoms to which they are attached, form the ring



, where  $\text{R}^m$  is  $\text{C}_{1-6}$ alkyl;

5  $\text{R}^1$  is selected from the group consisting of

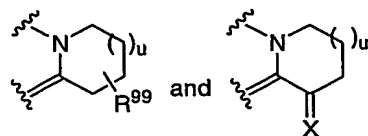
- 1) hydrogen,
- 2)  $(\text{CR}^a\text{R}^b)_{1-2}\text{R}^{40}$
- 3)  $(\text{CR}^a\text{R}^b)_{1-2}\text{OR}^{40}$ ,
- 4)  $(\text{CR}^a\text{R}^b)_{1-2}\text{N}(\text{R}^{40}\text{R}^{41})$ ,
- 5)  $(\text{CR}^a\text{R}^b)_{1-2}\text{N}(\text{R}^{40})\text{C}(\text{O})\text{OR}^{41}$ ,
- 6)  $(\text{CR}^a\text{R}^b)_{1-2}\text{N}(\text{R}^{40})(\text{CR}^c\text{R}^d)_2\text{N}(\text{R}^{41})\text{C}(\text{O})\text{R}^{49}$ ,
- 7)  $(\text{CR}^a\text{R}^b)_{1-2}\text{C}(\text{O})\text{OR}^{40}$ ,
- 8)  $(\text{CR}^a\text{R}^b)_{1-2}\text{N}(\text{R}^{40})(\text{CR}^c\text{R}^d)_{1-3}\text{R}^{41}$ , and
- 9) cyclopropyl; and

15  $\text{R}^5$  is selected from the group consisting of

- 1) hydrogen,
- 2) halogen,
- 3)  $\text{S}(\text{O})_{0-2}\text{N}(\text{R}^{53}\text{R}^{50})$ ,
- 4)  $\text{S}(\text{O})_{0-2}\text{R}^{62}$ ,
- 5)  $\text{CH}_3$ ,
- 6)  $\text{C}_3\text{-C}_6$  alkyl,
- 7)  $\text{C}_3\text{-C}_{10}$  cycloalkyl,
- 8)  $\text{R}^{82}$ ,

25 said alkyl, aryl, and cycloalkyl is unsubstituted, mono-substituted with  $\text{R}^{22}$ , di-substituted with  $\text{R}^{22}$  and  $\text{R}^{23}$ , tri-substituted with  $\text{R}^{22}$ ,  $\text{R}^{23}$  and  $\text{R}^{24}$ , or tetra-substituted with  $\text{R}^{22}$ ,  $\text{R}^{23}$ ,  $\text{R}^{24}$  and  $\text{R}^{25}$ ,

30 or  $\text{R}^1$  and  $\text{R}^5$  together with the atoms to which they are attached, form a ring selected from the group of structures consisting of



where  $u$  is 0 or 1,  $R^{99}$  is hydrogen or  $-OH$ , and  $X$  is  $O$  or  $\xi=NOH$ .

3. A compound of Claim 2, or a pharmaceutically acceptable salt thereof, wherein  $R^2$ ,  $R^8$ ,  $R^9$  and  $R^{10}$  are independently selected from the group consisting of:

- 1) hydrogen,
- 2) halogen,
- 3)  $OR^{43}$ , and
- 4)  $(CR^eR^f)_pC(O)N(R^{43}R^{44})$ .

4. A compound of Claim 3, or a pharmaceutically acceptable salt thereof, wherein  $R^1$  is selected from the group consisting of

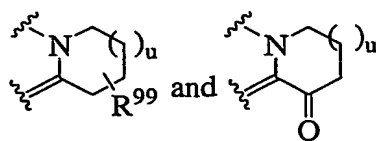
- 1) hydrogen,
- 2)  $(CR^aR^b)_{1-2}R^{40}$
- 3)  $(CR^aR^b)_{1-2}OR^{40}$ , or
- 4)  $(CR^aR^b)_{1-2}N(R^{40}R^{41})$ ;

$R^5$  is selected from the group consisting of

- 1) hydrogen,
- 2)  $C_3$ - $C_6$  alkyl, and
- 3)  $CH_3$ ,

said alkyl is unsubstituted, mono-substituted with  $R^{22}$ , di-substituted with  $R^{22}$  and  $R^{23}$ , tri-substituted with  $R^{22}$ ,  $R^{23}$  and  $R^{24}$ , or tetra-substituted with  $R^{22}$ ,  $R^{23}$ ,  $R^{24}$  and  $R^{25}$ ;

or  $R^1$  and  $R^5$  together with the atoms to which they are attached, form a ring selected from the group of structures consisting of



where  $u$  is 1, and  $R^{99}$  is hydrogen or  $-OH$ .

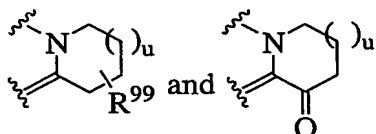


5. A compound of Claim 4, or a pharmaceutically acceptable salt thereof, wherein A is unsubstituted phenyl, or phenyl substituted with halogen.

6. A compound of Claim 5, or a pharmaceutically acceptable salt thereof, wherein R<sup>1</sup> is selected from the group consisting of -CH<sub>3</sub>, -CH<sub>2</sub>CH<sub>3</sub>, -(CH<sub>2</sub>)<sub>2</sub>OCH<sub>3</sub>, -(CH<sub>2</sub>)<sub>2</sub>NH<sub>2</sub>, and -(CH<sub>2</sub>)<sub>3</sub>NH<sub>2</sub>, -CH<sub>2</sub>C(O)OC(CH<sub>3</sub>)<sub>3</sub>; and

R<sup>5</sup> is selected from the group consisting of hydrogen, -C(CH<sub>3</sub>)<sub>3</sub>, -CH<sub>3</sub>,

or R<sup>1</sup> and R<sup>5</sup> together with the atoms to which they are attached, form a ring selected from the group of structures consisting of



where u is 1, and R<sup>99</sup> is hydrogen or -OH.

7. A compound of Claim 6, or a pharmaceutically acceptable salt thereof, selected from the group consisting of

3-tert-butyl-4-(3-fluorophenyl)-6-methoxy-2-methylisoquinolin-1(2H)-one,

3-tert-butyl-4-(4-fluorophenyl)-6-methoxy-2-methylisoquinolin-1(2H)-one,

6-methoxy-2-methyl-4-phenylisoquinolin-1(2H)-one,

4-(3-fluorophenyl)-6-methoxy-2,3-dimethylisoquinolin-1(2H)-one,

4-(4-fluorophenyl)-6-methoxy-2,3-dimethylisoquinolin-1(2H)-one,

(1E)-11-(3-fluorophenyl)-9-methoxy-3,4-dihydro-2H-pyrido[1,2-b]isoquinoline-1,6-dione 1-oxime,

3-tert-butyl-6-hydroxy-2-methyl-4-phenylisoquinolin-1(2H)-one,

2,3-dimethyl-4-phenylisoquinolin-1(2H)-one,

3-tert-butyl-2-ethyl-6-methoxy-4-phenylisoquinolin-1(2H)-one,

5 3-tert-butyl-6-methoxy-4-phenylisoquinolin-1(2H)-one,

2-ethyl-6-methoxy-3-methyl-4-phenylisoquinolin-1(2H)-one,

6-methoxy-3-methyl-4-phenylisoquinolin-1(2H)-one,

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6-methoxy-2-(2-methoxyethyl)-3-methyl-4-phenylisoquinolin-1(2H)-one,

2-(2-aminoethyl)-6-methoxy-3-methyl-4-phenylisoquinolin-1(2H)-one,

15 2-(3-aminopropyl)-6-methoxy-3-methyl-4-phenylisoquinolin-1(2H)-one,

3-tert-butyl-2-methyl-1-oxo-4-phenyl-1,2-dihydroisoquinoline-6-carbonitrile,

3-tert-butyl-8-hydroxy-2-methyl-4-phenylisoquinolin-1(2H)-one,

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3-tert-butyl-2-methyl-1-oxo-4-phenyl-1,2-dihydroisoquinoline-6-carboxamide,

3-tert-butyl-2-methyl-4-phenyl-6-(4-phenylbutoxy)isoquinolin-1(2H)-one,

25 3-tert-butyl-2-methyl-4-phenyl-6-[(5-phenylpentyl)oxy]isoquinolin-1(2H)-one,

11-(3-fluorophenyl)-9-methoxy-3,4-dihydro-2H-pyrido[1,2-b]isoquinoline-1,6-dione,

(+/-)-11-(3-fluorophenyl)-1-hydroxy-9-methoxy-1,2,3,4-tetrahydro-6H-pyrido[1,2-b]isoquinolin-6-one,

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(1S)-11-(3-fluorophenyl)-1-hydroxy-9-methoxy-1,2,3,4-tetrahydro-6H-pyrido[1,2-b]isoquinolin-6-one,

(1*R*)-11-(3-fluorophenyl)-1-hydroxy-9-methoxy-1,2,3,4-tetrahydro-6H-pyrido[1,2-*b*]isoquinolin-6-one,  
and

11-(3-fluorophenyl)-9-methoxy-1,2,3,4-tetrahydro-6H-pyrido[1,2-*b*]isoquinolin-6-one.

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8. A method of treating a condition in a mammal, the treatment of which is effected or facilitated by K<sub>v</sub>1.5 inhibition, which comprises administering a compound of Claim 1 in an amount that is effective at inhibiting K<sub>v</sub>1.5.

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9. A method of Claim 8, wherein the condition is cardiac arrhythmia.

10. A method of Claim 9, wherein the cardiac arrhythmia is selected from the group consisting of atrial flutter, atrial arrhythmia and supraventricular tachycardia.

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11. A method of Claim 10, wherein the cardiac arrhythmia is atrial fibrillation.

12. A method of preventing a condition in a mammal, the prevention of which is effected or facilitated by K<sub>v</sub>1.5 inhibition, which comprises administering a compound of Claim 1 in an amount that is effective at inhibiting K<sub>v</sub>1.5.

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13. A method of Claim 12, wherein the condition is cardiac arrhythmia.

14. A method of Claim 13, wherein the cardiac arrhythmia is selected from the group consisting of atrial flutter, atrial arrhythmia and supraventricular tachycardia.

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15. A method of Claim 14, wherein the cardiac arrhythmia is atrial fibrillation.

16. A method of Claim 12, wherein the condition is a thromboembolic event.

17. A method of Claim 16, wherein the thromboembolic event is a stroke.

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18. A method of Claim 12, wherein the condition is congestive heart failure.

19. A pharmaceutical formulation comprising a pharmaceutically acceptable carrier and the compound Claim 1 or a pharmaceutically acceptable crystal form or hydrate thereof.

20. A pharmaceutical composition made by combining the compound of Claim 1 and a pharmaceutically acceptable carrier.

5 21. A method of treating cardiac arrhythmia comprising administering a compound of Claim 1 with a compound selected from one of the classes of compounds consisting of antiarrhythmic agents having Kv1.5 blocking activities, ACE inhibitors, angiotensin II antagonists, cardiac glycosides, L-type calcium channel blockers, T-type calcium channel blockers, selective and nonselective beta  
10 inhibitors, low molecular weight heparin, unfractionated heparin, clopidogrel, ticlopidine, IIb/IIIa receptor antagonists, 5HT receptor antagonists, integrin receptor antagonists, thromboxane receptor antagonists, TAFI inhibitors and P2T receptor antagonists.

15 22. A method for inducing a condition of normal sinus rhythm in a patient having atrial fibrillation, which comprises treating the patient with a compound of Claim 1.

23. A method for treating tachycardia in a patient which comprises treating the patient with an antitachycardia device in combination with a compound of Claim 1.